

Remarks

Claim Amendments

Claim 7 has been amended herein. Support for the amendment can be found on page 21, lines 16-17 and 28-29. This amendment does not add any new matter.

Claim 31 has been added. Support for this amendment can be found on page 7, starting on line 7. Applicants respectfully point out that an invention does not have to be described *in ipsius verbis* or *in haec verba* in order to satisfy the written description requirement of 35 U.S.C. § 112. See, e.g., Purdue Pharma LP v. Faulding Inc., 230 F.2d 1320, 1323 (Fed. Cir. 2000). Rather, the disclosure must “reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question.” See, e.g., Fujikawa v. Wattanasin, 93 F.3d 1559, 1570 (Fed. Cir. 1996). Applicants direct the Examiner to page 7, where the Applicant clearly discloses that amino acid residues 195-215 of SEQ ID NO:6 correspond to the transmembrane domain of FDF03-S1. Applicants submit that the skilled artisan would recognize that Applicants had possession of a polypeptide consisting of the transmembrane domain of FDF03-S1 at the time the application was filed. Therefore, a claim which encompasses an antibody or fragment thereof which binds to a polypeptide comprising residues 195-205 of SEQ ID NO:6 is fully supported by the specification. Thus, this claim does not add new matter.

Rejection Under 35 U.S.C. § 112

The claims stand rejected under 35 U.S.C. § 112, first paragraph, as lacking written description for the phrase “but does not bind the polypeptide consisting of the amino acid sequence of SEQ ID NO:2.” Without conceding to the correctness of the Examiner’s rejection, Applicants have cancelled the objected phrase. Thus, this rejection is moot.

Rejection Under 35 U.S.C. § 102

The Pending Claims Are Novel over Lal

The claims are rejected under 35 U.S.C. § 102(e) as being anticipated by Lal (US Patent Application 2005/0155089). Applicants traverse.

Although Lal discloses a polypeptide comprising the amino acid sequence of SEQ ID NO:6, Lal does not disclose an antibody which binds to a polypeptide

consisting of the amino acid sequence of SEQ ID NO:6 and which specifically recognizes monocyte cells as recited by claim 1. Further, Lal does not disclose an antibody or fragment thereof that binds to a polypeptide comprising residues 195-205 of SEQ ID NO:6 as recited by claim 31.

Lal discloses the sequences of 184 proteins which contain a signal-peptide, but does not disclose any specific and substantial utility for any of these polypeptides. Thus, a person of skill in the art studying the Lal reference at the time the application was filed would have had no motivation to make antibodies which specifically bound to any of the disclosed sequences. In particular, a person of skill in the art would have had no motivation to make antibodies which specifically bound to a polypeptide comprising the amino acid sequence of SEQ ID NO:6. Lal does not teach that the polypeptide of SEQ ID NO:6 is specific for monocyte cells. Lal simply does not enable the use of an antibody which specifically binds an isolated polypeptide consisting of the amino acid sequence of SEQ UID NO:6 which can specifically recognize monocyte cells.

In view of the arguments presented above, Applicants respectfully submit that the claims are novel over Lal.

The Pending Claims Are Novel over Adema

Claims having substantially similar language were previously rejected over Adema (WO 98/24906). Adema discloses and claims the protein FDF03. The FDF03 protein is also disclosed in the present application as SEQ ID NO:2. The invention of the present application is a homologous protein termed FDF03-S1 by Applicants, and is directly compared to the FDF03 protein of Adema at page 7 of the specification.

The Examiner previously argued that since the amino acid sequences of the FDF03 protein disclosed as SEQ ID NO: 2 in Adema and of the FDF03-S1 protein disclosed as SEQ ID NO:6 of the present application are 80.4% identical, the antibodies taught in Adema would likely cross-react with the FDF03-S1 protein of SEQ ID NO:6. Therefore, according to the Examiner, the Adema antibodies anticipate Applicants claims.

Applicants traverse. The pending claims recite antibodies which ***specifically bind*** to SEQ ID NO:6. By definition, antibodies which specifically bind to a polypeptide encoded by one amino acid sequence do not bind to other polypeptides

encoded by a different amino acid sequence even if there is a significant overlap between the sequences. Thus, antibodies which specifically bind to SEQ ID NO:6 would not bind to SEQ ID NO:2. The Declaration under 37 C.F.R. § 1.132 of Joseph H. Phillips, submitted on May 21, 2007, demonstrates that persons skilled in the art can indeed make antibodies which bind to SEQ ID NO:6 but do not bind to SEQ ID NO:2.


In view of the arguments presented above, Applicants respectfully submit that the claims are novel over Adema.

Conclusion

Applicants respectfully submit that the instant application is in condition for allowance.

Schering-Plough Corporation
2000 Galloping Hill Road
K-6-1-1990
Kenilworth, New Jersey 07033-0530
Tel: (908) 298-2266
Fax: (908) 298-5388

Respectfully submitted,



Gloria Fuentes
Attorney for Applicants
Reg. No. 47,580